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Abstract:

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The device (10) for continuous generation of cold and heat by the magneto-calorific effect, comprises a chamber (11), divided into two adjacent compartments (12, 13), separated by a wall (14). The chamber (11) contains a rotating element (15) made from at least one magneto-calorific material, a first circuit (17a) with a first heat exchange fluid circulating therein and a second circuit (17b) with a second heat exchange fluid circulating therein. The chamber (11) is connected to magnetic device (16) for generating a magnetic field in the region of the compartment (12) in which the rotating element (15) is located. When the above is set in rotation the part thereof located in the first compartment (12) is magnetized upon undergoing an increase in temperature. On passing into the second compartment (13), the part is demagnetized upon undergoing a cooling. The heat and the cold thus generated are transmitted by the heat exchange fluids respectively to user circuits for heat (19) and cold (22) for recovery and use for ulterior purposes.